

Appendix G – Supplemental Noise Documentation

- Benefitted receiver notification letters and flyer with location maps
- Updated noise modeling results
- Benefitted receiver voting results



Minnesota Department of Transportation

District 1

1123 Mesaba Avenue
Duluth, MN 55811-2798
Office Tel: 218/725-2700
Fax: 218/725-2800

101 N Hoover Road
Virginia, MN 55792-3412
Office Tel: 218/742-1100
Fax: 218/749-7709

February 24, 2015

Dear Resident or Owner,

This letter is being resent due to a mix up in ballots; prior letters for the Midway area walls were sent to the 2nd Avenue neighborhood and vice versa. Thus, new ballots are attached and marked for clearly distinguishing the different areas and revised ballot.

The Minnesota Department of Transportation (MnDOT) is considering constructing a noise barrier along the west side of the new US 53 alignment in Virginia from approximately 10th Street S to 12th Street S (see enclosed figure) as part of the US 53 Virginia to Eveleth project. The wall is proposed to be placed on the north side of US 53 between the neighborhood and the proposed alignment. The proposed wall would be approximately 20 feet tall and 1,260 feet long.

A number of properties in your neighborhood are being offered the chance to vote on this proposed noise barrier. Benefitted receivers are those properties that would receive a noise benefit (defined as a reduction of at least five decibels (dBA)) from the construction of the noise barrier. Your property has been identified as a benefitted receiver, and this is your opportunity to vote on whether or not the proposed barrier should be built. For rental properties, both the owner and the renter have the opportunity to independently express their opinions.

An open house is set for Thursday, March 5th from 5:00 to 7:00 pm in the Laurentian Conference Room at MnDOT's Virginia office (101 N Hoover Road, Virginia, MN 55792). MnDOT representatives and staff from Kimley-Horn and Associates will be in attendance to provide information and materials on the proposed noise barrier.

The purpose of the open house is to solicit your input on whether or not to build the noise barrier. This is a one-time opportunity to receive a noise barrier as part of the US 53 project. This barrier will be proposed for construction unless more than 50 percent of the total eligible points are not in favor of the barrier. Please take time to make your opinion known. Your response will become part of the official project record.

A short ballot is located on the back of this notice. You may bring your ballot to the open house, or you can receive one at the open house by showing a photo ID. If you are unable to attend, you may mail the ballot to Pat Huston, MnDOT Project Manager, at 1123 Mesaba Avenue, Duluth, MN 55811 (self-addressed envelope included).

This notice has been mailed to residents and owners of benefitted receivers only. If you have neighbors who did not receive this notice but are interested in the project they are welcome to attend the open house, but only benefitted receivers are eligible to vote using the ballot on the back of this notice. Opinion forms are required to be returned by March 20, 2015.

Additional information on MnDOT's noise policy can be found at
<http://www.dot.state.mn.us/environment/noise/index.html>.

Sincerely,

Pat Huston
Project Manager
MnDOT District 1
218-725-2707

An Equal Opportunity Employer



AREA C NOISE WALL (NEAR 2ND AVENUE)

Please mark one:

- ☐ Owner
- ☐ Resident
- ☐ Owner and Resident

Name: _____

Address: _____

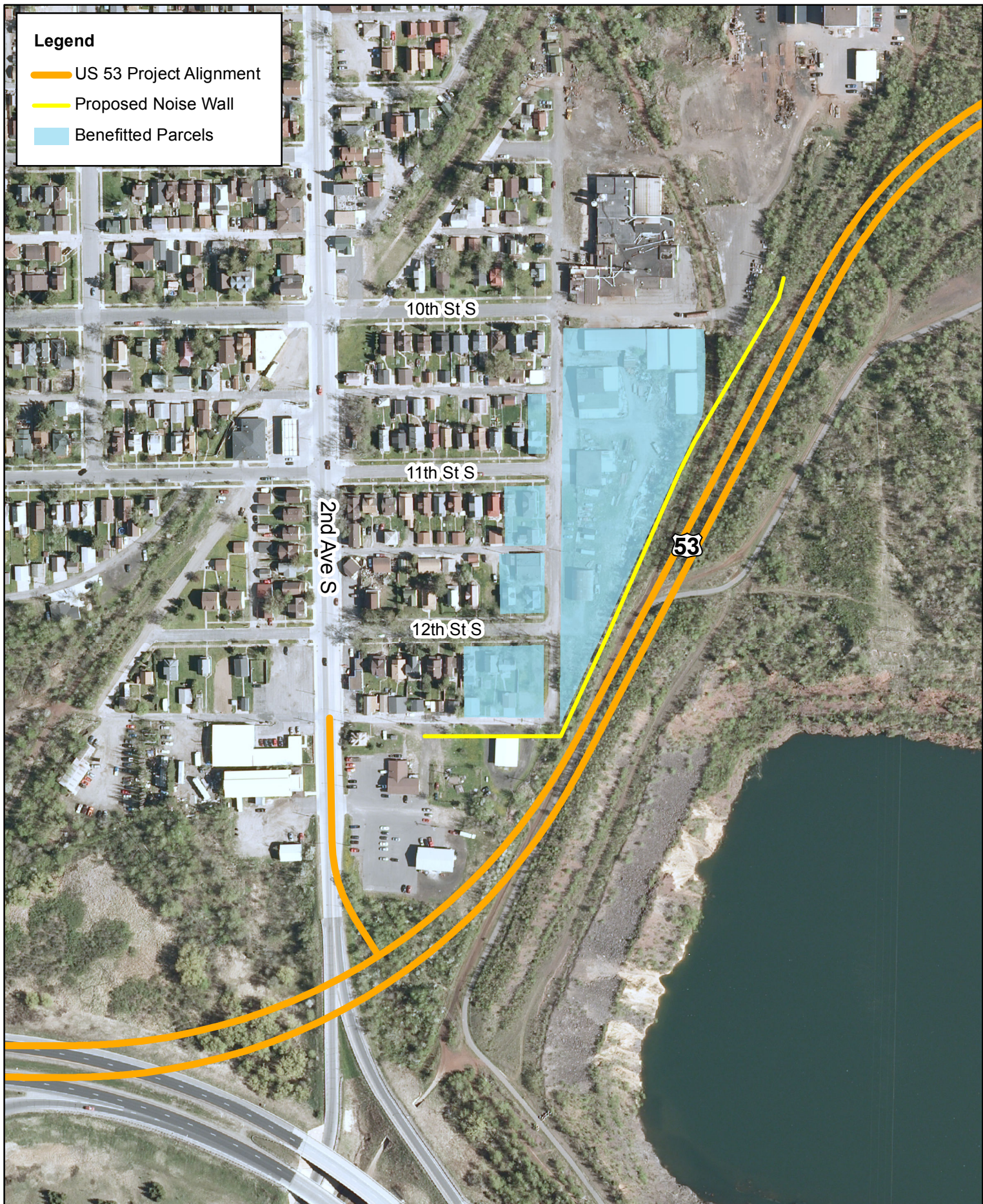
Please mark one:

- ☐ I want the noise barrier
- ☐ I do not want the noise barrier

Comments: _____

An Equal Opportunity Employer







Minnesota Department of Transportation

District 1

1123 Mesaba Avenue
Duluth, MN 55811-2798
Office Tel: 218/725-2700
Fax: 218/725-2800

101 N Hoover Road
Virginia, MN 55792-3412
Office Tel: 218/742-1100
Fax: 218/749-7709

February 24, 2015

Dear Resident or Owner,

This letter is being resent due to a mix up in ballots; prior letters for the Midway area walls were sent to the 2nd Avenue neighborhood and vice versa. Thus, new ballots are attached and marked for clearly distinguishing the different areas and revised ballot.

The Minnesota Department of Transportation (MnDOT) is considering constructing a noise barrier along the east side of US 53 in Virginia from approximately Cuyuna Drive to Mesabi Drive (see enclosed figure) as part of the US 53 Virginia to Eveleth project. The wall is proposed to be placed in the median between Midway Drive and US 53. The proposed wall would be 20 feet tall and 2,074 feet long.

A number of properties in your neighborhood are being offered the chance to vote on this proposed noise barrier. Benefitted receivers are those properties that would receive a noise benefit (defined as a reduction of at least five decibels (dBA)) from the construction of the noise barrier. Your property has been identified as a benefitted receiver, and this is your opportunity to vote on whether or not the proposed barrier should be built. For rental properties, both the owner and the renter have the opportunity to independently express their opinions.

An open house is set for Thursday, March 5th from 5:00 to 7:00 pm in the Laurentian Conference Room at MnDOT's Virginia office (101 N Hoover Road, Virginia, MN 55792). MnDOT representatives and staff from Kimley-Horn and Associates will be in attendance to provide information and materials on the proposed noise barrier.

The purpose of the open house is to solicit your input on whether or not to build the noise barrier. This is a one-time opportunity to receive a noise barrier as part of the US 53 project. This barrier will be proposed for construction unless more than 50 percent of the total eligible points are not in favor of the barrier. Please take time to make your opinion known. Your response will become part of the official project record.

A short ballot is located on the back of this notice. You may bring your ballot to the open house, or you can receive one at the open house by showing a photo ID. If you are unable to attend, you may mail the ballot to Pat Huston, MnDOT Project Manager, at 1123 Mesaba Avenue, Duluth, MN 55811 (self-addressed envelope included).

This notice has been mailed to residents and owners of benefitted receivers only. If you have neighbors who did not receive this notice but are interested in the project they are welcome to attend the open house, but only benefitted receivers are eligible to vote using the ballot on the back of this notice. Opinion forms are required to be returned by March 20, 2015.

Additional information on MnDOT's noise policy can be found at
<http://www.dot.state.mn.us/environment/noise/index.html>.

Sincerely,

Pat Huston
Project Manager
MnDOT District 1
218-725-2707

An Equal Opportunity Employer



AREA F NOISE WALL (NEAR MIDWAY)

Please mark one:

- ☐ Owner
- ☐ Resident
- ☐ Owner and Resident

Name: _____

Address: _____

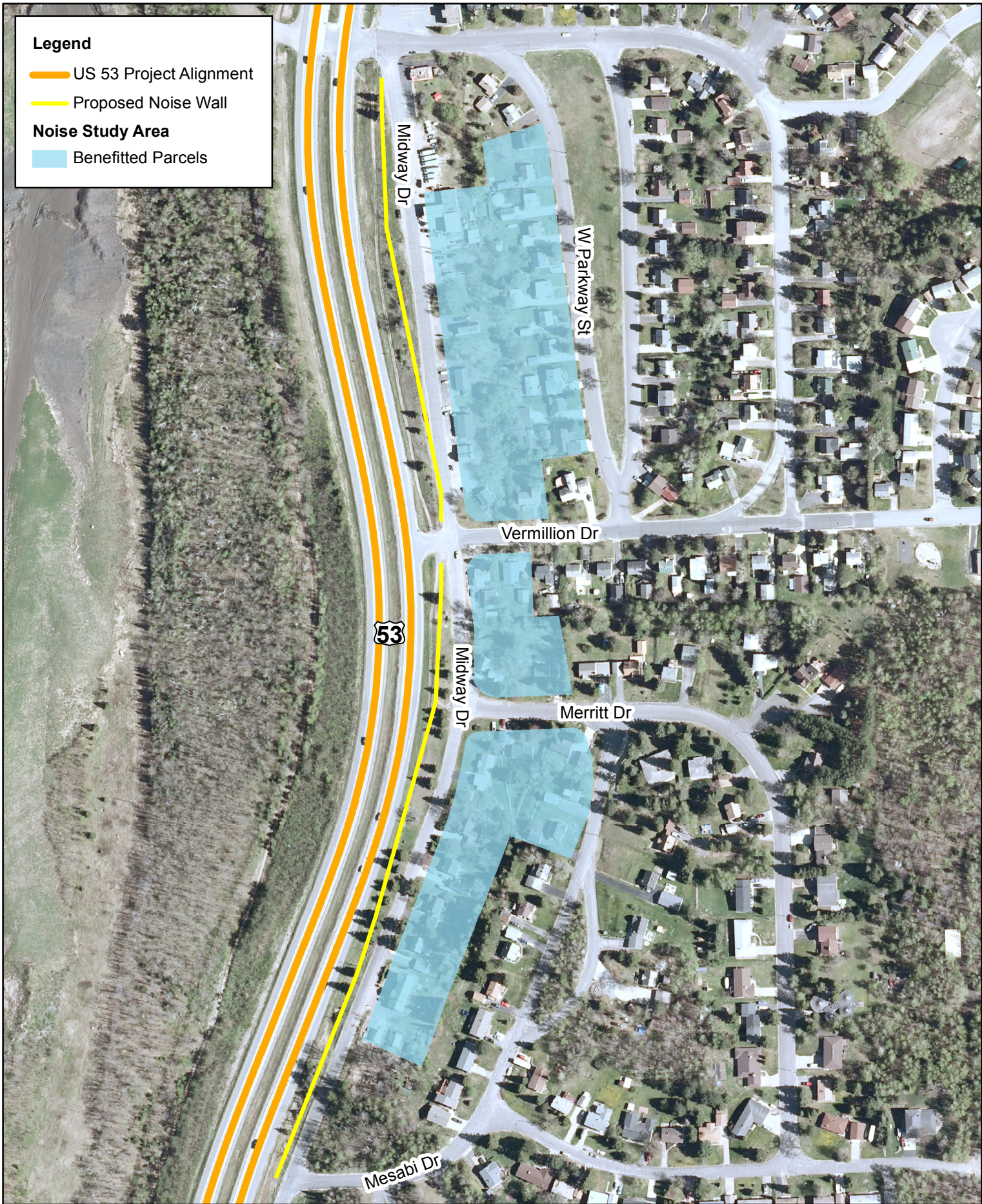
Please mark one:

- ☐ I want the noise barrier
- ☐ I do not want the noise barrier

Comments: _____

An Equal Opportunity Employer







US Highway 53 Virginia to Eleventh

Noise Wall Open House (March 5, 2015)

You are invited to a **noise wall open house** for the US Highway 53 Virginia to Eveleth project. Noise walls have been proposed as part of this project at two locations:

- Near 2nd Avenue from approximately 10th Street S to 12th Street S
- Near Midway from approximately Cuyuna Drive to Mesabi Drive

Properties that would be benefitted by a noise wall have the opportunity to vote on whether or not the proposed wall should be built. There was a mix-up with the initial ballot mailing (letters for the 2nd Avenue wall were sent to the Midway neighborhood and vice versa) so new ballots were mailed on February 24, 2015.

PLEASE JOIN US!

When:

Thursday, March 5

5:00 pm to 7:00 pm

Where:

MnDOT

Laurentian Conference Room

101 N Hoover Road

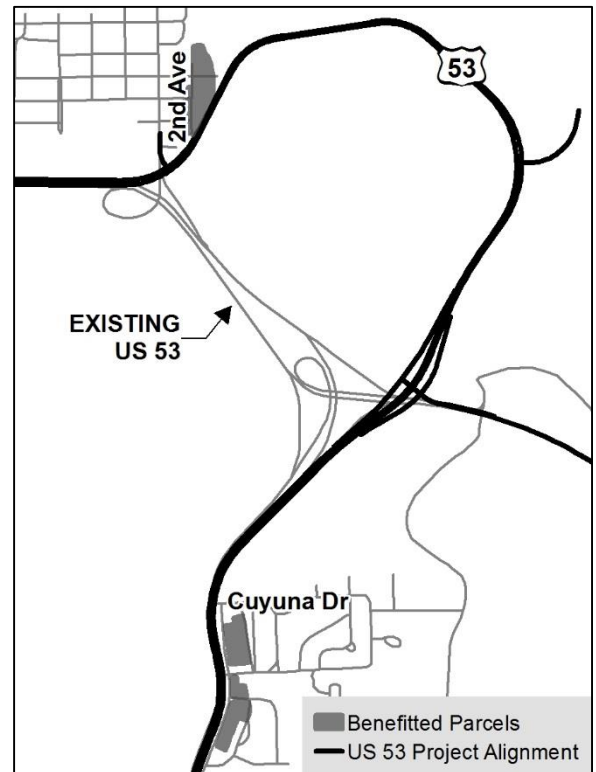
Virginia, MN 55792

MEETING PURPOSE

- Provide information on the proposed noise walls
- Solicit input on whether or not to build the noise walls

FOR MORE INFORMATION

- Please visit the project website at www.dot.state.mn.us/d1/projects/hwy53relocation/
- Or contact the MnDOT Project Manager:
Pat Huston, MnDOT District 1, 1123 Mesaba Avenue, Duluth, MN 55811
Patrick.Huston@state.mn.us, 218-725-2707





Minnesota Department of Transportation

District 1

1123 Mesaba Avenue
Duluth, MN 55811-2798
Office Tel: 218/725-2700
Fax: 218/725-2800

101 N Hoover Road
Virginia, MN 55792-3412
Office Tel: 218/742-1100
Fax: 218/749-7709

July 17, 2015

Dear Resident or Owner,

The Minnesota Department of Transportation (MnDOT) is considering constructing a noise barrier along the east side of US 53 in Virginia from approximately Cuyuna Drive to Mesabi Drive (see enclosed figure) as part of the US 53 Virginia to Eveleth project. The wall is proposed to be placed in the median between Midway Drive and US 53. The proposed wall would be 20 feet tall and 2,074 feet long.

A number of properties in your neighborhood are being offered the chance to vote on this proposed noise barrier. This ballot was originally sent to 48 properties in April 2015. Since that time, refinements of the noise analysis during the project development process show that an additional seven properties along the south end of Mesabi Drive will receive a noise benefit from the noise wall, and your property is one of them. Benefitted receivers are those properties that would receive a noise benefit (defined as a reduction of at least five decibels (dBA)) from the construction of the noise barrier. Your property has been identified as a benefitted receiver, and this is your opportunity to vote on whether or not the proposed barrier should be built. For rental properties, both the owner and the renter have the opportunity to independently express their opinions.

This barrier will be proposed for construction unless more than 50 percent of the total eligible points are not in favor of the barrier. Please take time to make your opinion known. Your response will become part of the official project record.

A meeting is planned for August 3, 2015 from 5:00 PM – 7:00 PM in the Laurentian Conference Room at 101 N Hoover Road, Virginia, MN 55792. Please note that the open house is open to anyone, however, only the seven properties along Mesabi Drive are receiving a direct invitation.

A short ballot is located on the back of this notice. Please bring ballot to the open house, scan and email the ballot to Patrick.Huston@state.mn.us or mail the ballot to Pat Huston, MnDOT Project Manager, at 1123 Mesaba Avenue, Duluth, MN 55811. You are requested to submit your ballot by August 18, 2015, though MnDOT's encourages you to do so early so that results can be incorporated into the project as soon as possible.

This notice has been sent to seven benefitted residents and owners of benefitted receivers only in your immediate vicinity along the south end of Mesabi Drive.

Additional information on MnDOT's noise policy can be found at <http://www.dot.state.mn.us/environment/noise/index.html>.

Sincerely,

Pat Huston
Project Manager
MnDOT District 1
218-725-2707

An Equal Opportunity Employer



AREA F NOISE WALL (NEAR MIDWAY)

Please mark one:

- ☐ Owner
- ☐ Resident
- ☐ Owner and Resident

Name: _____

Address: _____

Please mark one:

- ☐ I want the noise barrier
- ☐ I do not want the noise barrier

Comments: _____

Parcel ID # XX

An Equal Opportunity Employer



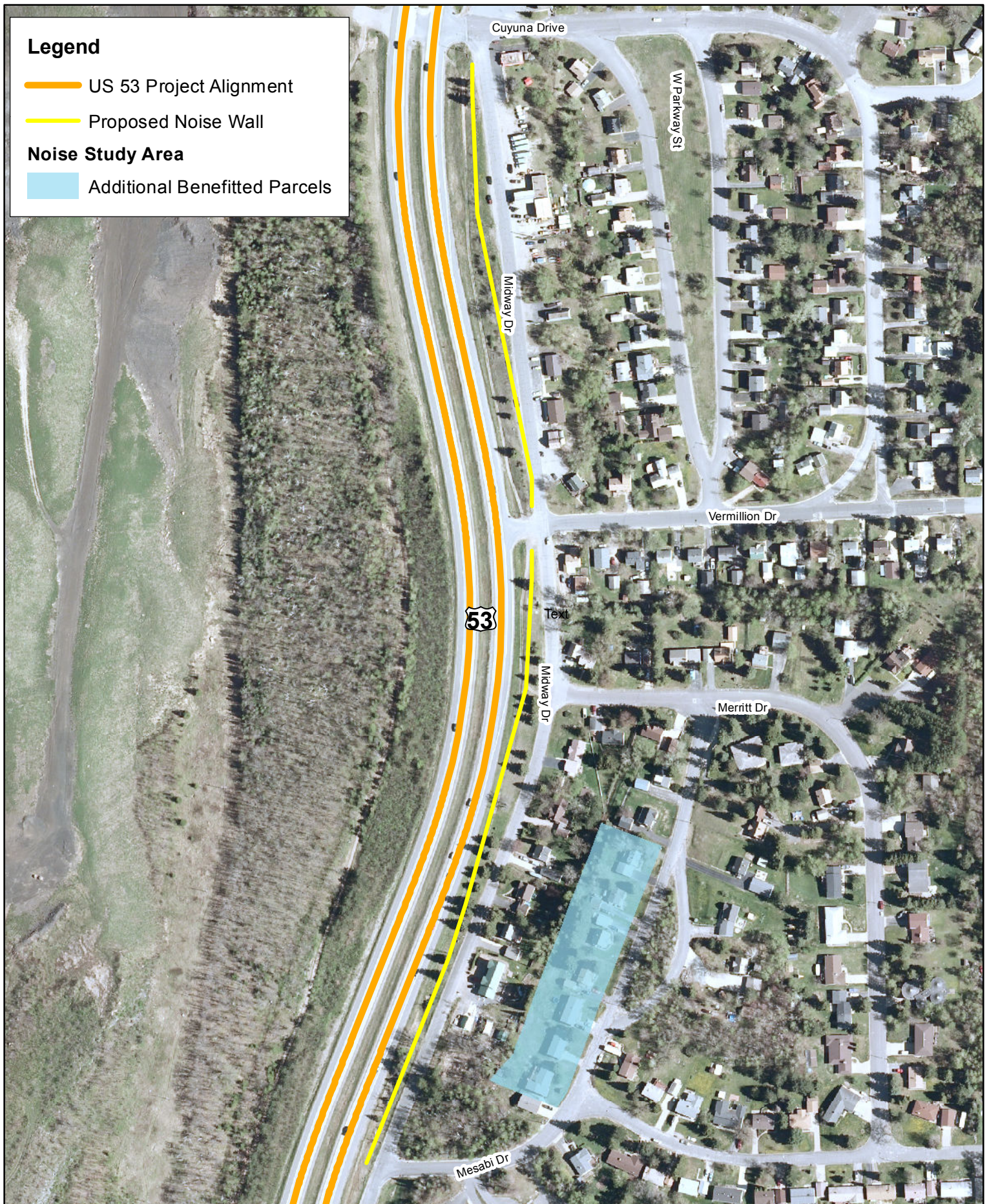
Legend

— US 53 Project Alignment

— Proposed Noise Wall

Noise Study Area

Additional Benefitted Parcels





Minnesota Department of Transportation

District 1

1123 Mesaba Avenue
Duluth, MN 55811-2798
Office Tel: 218/725-2700
Fax: 218/725-2800

101 N Hoover Road
Virginia, MN 55792-3412
Office Tel: 218/742-1100
Fax: 218/749-7709

August 3, 2015

Dear Resident or Owner,

You were notified in February 2015 that the Minnesota Department of Transportation (MnDOT) is considering constructing a noise barrier along the east side of US 53 in Virginia from approximately Cuyuna Drive to Mesabi Drive as part of the US 53 Virginia to Eveleth project. The wall is proposed to be placed in the median between Midway Drive and US 53. The proposed wall would be 20 feet tall and 2,074 feet long.

A ballot was originally sent to 48 properties in February 2015. Since that time, the noise analysis has been refined during the project development process.

A minimum noise reduction of 5 decibels is required in order for a property to be considered a "benefitted receptor" and enable the property to vote on the noise wall installation. As a result of the recent noise analysis refinement, four properties in the project area are no longer defined as benefitted receptors, including your property. The proposed noise wall is still predicted to provide a noise level reduction, however, predicted noise on your property has crossed a threshold from previously experiencing a reduction of more than five decibels, to a reduction of slightly less than five decibels. This change in predicted noise reduction means that your property will no longer be included in the voting process for the noise wall.

Although no action is required on your part, you are invited to an informational meeting to discuss this change on August 17, from 5:00 PM to 6:30 PM. The meeting will be held in the Laurentian Conference Room at the MnDOT office in Virginia: 101 N Hoover Road, Virginia, MN 55792.

Note that only the four properties in the project area that are no longer defined as benefitted receptors have been directly invited to this meeting.

If you have any questions about the process, please contact Patrick.Huston@state.mn.us, 218-725-2707 or by U.S. mail to Pat Huston, MnDOT Project Manager, 1123 Mesaba Avenue, Duluth, MN 55811.

Additional information on MnDOT's noise policy can be found at <http://www.dot.state.mn.us/environment/noise/index.html>.

Sincerely,

Pat Huston
Project Manager
MnDOT District 1
218-725-2707

An Equal Opportunity Employer



Table A-1: Area C – Project Corridor – Noise Modeling Results

Receptor ¹	Modeled Noise Levels (dBA)													
	A.		B.		C.		D.		E.		F.		G.	
	2012 Existing US 53	2037 Existing US 53	Existing US 53 Noise Change (B-A)	Preferred Alternative (E-2)	Alternative E-2 Build Noise Change (D-A)	Alternative E-2 Build with 20-foot Noise Wall	Noise Wall Noise Change (D-F)							
DAYTIME	L10	L50	L10	L50	L10	L50	L10	L50	L10	L50	L10	L50 ²	L10 ³	L50 ²
R21 (I)	62.7	57.0	63.5	58.2	0.8	1.2	66.0	61.7	3.3	4.7	65.9	NA	0.1	NA
R22 (I)	59.9	55.0	60.7	56.2	0.8	1.2	70.4	64.8	10.5	9.8	70.3	NA	0.1	NA
R23 (I) ⁴	56.6	52.9	57.3	53.9	0.7	1.0	NA	NA	NA	NA	NA	NA	NA	NA
R24 (R)	56.5	52.6	57.3	53.7	0.8	1.1	67.5	62.6	11.0	10.0	59.4	NA	8.1	NA
R26 (R)	57.9	53.2	58.7	54.4	0.8	1.2	66.2	61.8	8.3	8.6	59.3	NA	6.9	NA
R26A (R)	59.2	53.7	60.0	54.9	0.8	1.2	65.1	61.1	5.9	7.4	61.1	NA	4.0	NA
R26B (R)	61.7	54.7	62.6	55.9	0.9	1.2	65.3	60.6	3.6	5.9	64.1	NA	1.2	NA
R29 (I)	53.3	50.1	54.1	51.1	0.8	1.0	68.4	62.9	15.1	12.8	58.5	NA	9.9	NA
R30 (R)	54.9	51.2	55.7	52.3	0.8	1.1	66.1	61.2	11.2	10.0	58.3	NA	7.8	NA
R31 (R)	55.6	51.5	56.3	52.6	0.7	1.1	64.9	60.5	9.3	9.0	58.4	NA	6.5	NA
R34 (R)	54.3	50.5	55.1	51.6	0.8	1.1	64.3	60.0	10.0	9.5	57.6	NA	6.7	NA
R35 (R)	55.2	51.0	56.0	52.1	0.8	1.1	63.6	59.6	8.4	8.6	57.9	NA	5.7	NA
R36 (R)	54.0	50.0	54.8	51.1	0.8	1.1	63.0	59.1	9.0	9.1	57.5	NA	5.5	NA
R37 (R)	54.7	50.3	55.5	51.4	0.8	1.1	62.1	58.4	7.4	8.1	57.5	NA	4.6	NA
R40 (R)	53.7	49.6	54.5	50.7	0.8	1.1	61.9	58.2	8.2	8.6	57.4	NA	4.5	NA
R41 (R)	54.4	49.9	55.1	51.0	0.7	1.1	61.4	57.8	7.0	7.9	57.4	NA	4.0	NA
R43 (R)	54.0	49.2	54.8	50.4	0.8	1.2	60.2	56.8	6.2	7.6	57.4	NA	2.8	NA
R44 (R)	53.5	49.1	54.3	50.2	0.8	1.1	60.6	57.1	7.1	8.0	57.5	NA	3.1	NA
R46 (I)	51.8	48.3	52.6	49.3	0.8	1.0	63.1	59.0	11.3	10.7	58.8	NA	4.3	NA
MIN	51.8	48.3	52.6	49.4	0.6	1.0	60.2	57.1	3.3	4.7	65.9	NA	0.1	NA
MAX	62.7	57.0	63.5	58.2	0.9	1.2	70.4	64.8	15.1	12.8	70.3	NA	9.9	NA
Exceedances														
State	0	0	0	0	NA	NA	5	7	NA	NA	0	NA	NA	NA
Federal	0	NA	0	NA	0	NA	0	NA	16	NA	0	NA	NA	NA

Note: **Bold** numbers exceed Minnesota State Noise Standards, and underlined numbers approach or exceed the Federal Noise Abatement Criteria.

¹ (R) indicates residential location. (C) indicates commercial location. (I) indicates industrial location.

² L50 data for noise wall not included because is not a determinate for noise mitigation requirements.

³ Double Underlined numbers indicate receptors that are benefitted receivers of a noise abatement wall.

⁴ Receptor R23 will be acquired as part of the project.

Table A-1: Area C – Project Corridor – Noise Modeling Results (Continued)

Receptor ¹	Modeled Noise Levels (dBA)													
	A.		B.		C.		D.		E.		F.		G.	
	2012 Existing US 53		2037 Existing US 53		Existing US 53 Noise Change (B-A)		Preferred Alternative (E-2)		Alternative E-2 Build Noise Change (D-A)		Alternative E-2 Build with 20-foot Noise Wall		Noise Wall Noise Change (D-F)	
NIGHTTIME	L10	L50	L10	L50	L10	L50	L10	L50	L10	L50	L10	L50 ²	L10 ³	L50 ²
R21 (I)	60.6	54.4	61.3	55.5	0.7	1.1	64.2	59.3	3.6	4.9	64.1	NA	0.1	NA
R22 (I)	57.9	52.5	58.5	53.6	0.6	1.1	68.7	62.4	<u>10.8</u>	9.9	68.6	NA	0.1	NA
R23 (I) ⁴	54.7	50.5	55.3	51.5	0.6	1.0	NA	NA	NA	NA	NA	NA	NA	NA
R24 (R)	54.5	50.1	55.2	51.1	0.7	1.0	65.8	60.3	<u>11.3</u>	10.2	57.6	NA	<u>8.2</u>	NA
R26 (R)	55.6	50.6	56.3	51.6	0.7	1.0	64.6	59.5	<u>9.0</u>	8.9	57.3	NA	<u>7.3</u>	NA
R26A (R)	56.9	50.8	57.6	51.9	0.7	1.1	63.4	58.7	<u>6.5</u>	7.9	59.0	NA	4.4	NA
R26B (R)	59.1	51.3	59.8	52.4	0.7	1.1	63.3	58.1	4.2	6.8	61.9	NA	1.4	NA
R29 (I)	51.4	47.7	52.1	48.7	0.7	1.0	66.7	60.5	<u>15.3</u>	12.8	56.8	NA	<u>9.9</u>	NA
R30 (R)	53.0	48.8	53.6	49.8	0.6	1.0	64.4	58.9	<u>11.4</u>	10.1	56.5	NA	<u>7.9</u>	NA
R31 (R)	53.6	49.0	54.2	50.0	0.6	1.0	63.2	58.2	<u>9.6</u>	9.2	56.5	NA	<u>6.7</u>	NA
R34 (R)	52.3	47.9	52.9	48.9	0.6	1.0	62.6	57.7	<u>10.3</u>	9.8	55.8	NA	<u>6.8</u>	NA
R35 (R)	53.1	48.4	53.7	49.4	0.6	1.0	61.9	57.3	<u>8.8</u>	8.9	56.0	NA	<u>5.9</u>	NA
R36 (R)	52.0	47.4	52.6	48.4	0.6	1.0	61.4	56.8	<u>9.4</u>	9.4	55.7	NA	<u>5.7</u>	NA
R37 (R)	52.6	47.5	53.2	48.5	0.6	1.0	60.4	56.2	<u>7.8</u>	8.7	55.6	NA	4.8	NA
R40 (R)	51.7	46.9	52.3	47.9	0.6	1.0	60.3	56.0	<u>8.6</u>	9.1	55.6	NA	4.7	NA
R41 (R)	52.2	47.1	52.8	48.1	0.6	1.0	59.7	55.6	<u>7.5</u>	8.5	55.6	NA	4.1	NA
R43 (R)	51.8	46.4	52.4	47.4	0.6	1.0	58.5	54.5	<u>6.7</u>	8.1	55.6	NA	2.9	NA
R44 (R)	51.4	46.3	52.0	47.3	0.6	1.0	59.0	54.9	<u>7.6</u>	8.6	55.7	NA	3.3	NA
R46 (I)	49.8	45.8	50.4	46.8	0.6	1.0	61.5	56.7	<u>11.7</u>	10.9	57.2	NA	4.3	NA
MIN	49.8	45.8	50.4	46.8	0.6	1.0	58.5	54.5	3.6	4.9	55.6	NA	0.1	NA
MAX	60.6	54.4	61.3	55.5	0.7	1.1	68.7	62.4	15.3	12.8	68.6	NA	9.9	NA
Exceedances														
State	2	4	4	4	NA	NA	14	14	NA	NA	14	NA	NA	NA
Federal	0	NA	0	NA	0	NA	0	NA	16	NA	0	NA	NA	NA

Note: **Bold** numbers exceed Minnesota State Noise Standards, and underlined numbers approach or exceed the Federal Noise Abatement Criteria.

¹ (R) indicates residential location. (C) indicates commercial location. (I) indicates industrial location.

² L50 data for noise wall not included because is not a determinate for noise mitigation requirements.

³ Double Underlined numbers indicate receptors that are benefitted receivers of a noise abatement wall.

⁴ Receptor R23 will be acquired as part of the project.

Table A-2: Area F - Project Corridor - Noise Modeling Results

Receptor ¹	Modeled Noise Levels (dBA)													
	A.		B.		C.		D.		E.		F.		G.	
	2012 Existing US 53		2037 Existing US 53		Existing US 53 Noise Change (B-A)		Preferred Alternative (E-2)		Alternative E-2 Build Noise Change (D-A)		Alternative E-2 Build with 20-foot Noise Wall		Noise Wall Noise Change (D-F)	
DAYTIME	L10	L50	L10	L50	L10	L50	L10	L50	0.8	1.1	L10	L50 ²	L10 ³	L50 ²
R2 (C)	66.9	61.0	67.7	62.2	0.8	1.2	68.6	63.2	1.7	2.2	66.3	NA	2.3	NA
R2B (C)	67.2	61.6	68.0	62.7	0.8	1.1	68.1	62.8	0.9	1.2	58.9	NA	<u>9.2</u>	NA
R2C (C)	66.3	60.9	67.1	62.0	0.8	1.1	67.3	62.1	1.0	1.2	58.1	NA	<u>9.2</u>	NA
R1 (C)	67.3	61.5	68.1	62.7	0.8	1.2	68.2	62.7	0.9	1.2	57.3	NA	<u>10.9</u>	NA
R3 (C)	68.8	62.7	69.6	63.9	0.8	1.2	69.2	63.7	0.4	1.0	69.2	NA	0.0	NA
R4 (R)	63.6	58.5	64.4	59.6	0.8	1.1	63.9	59.2	0.3	0.7	59.4	NA	4.5	NA
R4-1 (R) ⁴							68.3				62.3		<u>6.0</u>	NA
R5 (R)	61.7	57.2	62.4	58.3	0.7	1.1	62.3	58.3	0.6	1.1	56.2	NA	<u>6.1</u>	NA
R5A (R)	61.4	57.0	62.1	58.1	0.7	1.1	62.1	58.4	0.7	1.4	56.8	NA	<u>5.3</u>	NA
R5B (R)	62.0	57.4	62.7	58.4	0.7	1.0	62.5	58.3	0.5	0.9	56.2	NA	<u>6.3</u>	NA
R5C (R)	61.6	57.3	62.4	58.3	0.8	1.0	62.8	59.0	1.2	1.7	59.6	NA	3.2	NA
R5D (R)	62.4	57.6	63.2	58.7	0.8	1.1	62.8	58.3	0.4	0.7	57.0	NA	<u>5.8</u>	NA
R6 (R)	61.7	57.1	62.4	58.2	0.7	1.1	62.5	58.9	0.8	1.8	58.0	NA	4.5	NA
R7 (R)	63.2	58.5	63.9	59.6	0.7	1.1	64.1	60.1	0.9	1.6	62.7	NA	1.4	NA
R51 (R)	63.0	58.4	63.7	59.5	0.7	1.1	63.7	59.7	0.7	1.3	62.9	NA	0.8	NA
RN1 (R)	67.4	60.7	68.2	61.9	0.8	1.2	67.8	61.8	0.4	1.1	62.5	NA	<u>5.3</u>	NA
RN2 (R)	66.3	60.1	67.1	61.3	0.8	1.2	66.9	61.2	0.6	1.1	56.5	NA	<u>10.4</u>	NA
RN3 (R)	66.6	60.4	67.4	61.6	0.8	1.2	67.4	61.5	0.8	1.1	56.1	NA	<u>11.3</u>	NA
RN4 (R)	67.0	60.6	67.8	61.8	0.8	1.2	67.7	61.8	0.7	1.2	56.3	NA	<u>11.4</u>	NA
RN5 (R)	67.3	60.6	68.1	61.8	0.8	1.2	68.1	61.8	0.8	1.2	56.4	NA	<u>11.7</u>	NA
RN6 (R)	67.7	61.0	68.5	62.2	0.8	1.2	68.3	62.2	0.6	1.2	56.7	NA	<u>11.6</u>	NA
RN7 (R)	68.2	61.8	69.0	63.0	0.8	1.2	68.4	63.0	0.2	1.2	57.0	NA	<u>11.4</u>	NA
RN8 (R)	68.2	61.9	69.0	63.0	0.8	1.1	68.7	63.0	0.5	1.1	57.7	NA	<u>11.0</u>	NA
RN9 (R)	68.4	62.1	69.2	63.3	0.8	1.2	69.1	63.3	0.7	1.2	58.5	NA	<u>10.6</u>	NA
RN10 (R)	66.0	60.7	66.7	61.8	0.7	1.1	66.7	61.8	0.7	1.1	66.1	NA	0.6	NA
RN11 (C)	66.3	60.6	67.1	61.7	0.8	1.1	67.1	61.7	0.8	1.1	67.0	NA	0.1	NA
RN12 (R)	63.6	58.8	64.3	59.9	0.7	1.1	64.3	59.9	0.7	1.1	59.4	NA	4.9	NA
RN13 (R)	63.4	58.7	64.2	59.7	0.8	1.0	64.2	59.7	0.8	1.0	58.8	NA	<u>5.4</u>	NA
RN14 (R)	63.1	58.3	63.8	59.4	0.7	1.1	63.8	59.3	0.7	1.0	57.8	NA	<u>6.0</u>	NA
RN15 (R)	63.2	58.4	63.9	59.5	0.7	1.1	63.8	59.4	0.6	1.0	57.5	NA	<u>6.3</u>	NA

Receptor ¹	Modeled Noise Levels (dBA)													
	A.		B.		C.		D.		E.		F.		G.	
	2012 Existing US 53		2037 Existing US 53		Existing US 53 Noise Change (B-A)		Preferred Alternative (E-2)		Alternative E-2 Build Noise Change (D-A)		Alternative E-2 Build with 20-foot Noise Wall		Noise Wall Noise Change (D-F)	
RN16 (R)	63.0	58.2	63.8	59.3	0.8	1.1	63.7	59.3	0.7	1.1	57.2	NA	<u>6.5</u>	NA
RN17 (R)	62.6	57.9	63.3	59.0	0.7	1.1	63.3	59.0	0.7	1.1	56.9	NA	<u>6.4</u>	NA
RN18 (R)	62.8	58.1	63.5	59.1	0.7	1.0	63.5	59.1	0.7	1.0	57.0	NA	<u>6.5</u>	NA
RN19 (R)	62.6	57.9	63.4	59.0	0.8	1.1	63.3	59.0	0.7	1.1	57.0	NA	<u>6.3</u>	NA
RN20 (R)	62.2	57.6	62.9	58.6	0.7	1.0	62.9	58.6	0.7	1.0	57.0	NA	<u>5.9</u>	NA
RN21 (R)	62.0	57.4	62.7	58.5	0.7	1.1	62.7	58.4	0.7	1.0	57.1	NA	<u>5.6</u>	NA
RN22 (R)	62.0	57.4	62.7	58.5	0.7	1.1	62.6	58.4	0.6	1.0	56.1	NA	<u>6.5</u>	NA
RN23 (R)	64.6	59.3	65.3	60.4	0.7	1.1	65.2	60.3	0.6	1.0	56.2	NA	<u>9.0</u>	NA
RN24 (R)	63.7	58.5	64.5	59.6	0.8	1.1	64.3	59.6	0.6	1.1	58.0	NA	<u>6.3</u>	NA
RN25 (R)	64.9	59.2	65.7	60.4	0.8	1.2	65.4	60.3	0.5	1.1	60.7	NA	4.7	NA
MIN	61.4	57.0	62.1	58.1	0.7	1.0	62.1	58.3	0.2	0.7	56.1	NA	0.0	NA
MAX	68.8	62.7	69.6	63.9	0.8	1.2	69.2	63.7	1.7	2.2	69.2	NA	11.7	NA
Exceedances														
State	11	11	13	14	NA	NA	13	13	NA	NA	1	NA	NA	NA
Federal	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	NA	NA

Note: **Bold** numbers exceed Minnesota State Noise Standards, and underlined numbers approach or exceed the Federal Noise Abatement Criteria.

¹ (R) indicates residential location. (C) indicates commercial location. (I) indicates industrial location.

² L50 data for noise wall not included because is not a determinate for noise mitigation requirements.

³ Underlined numbers indicate receptors that are benefitted receivers of a noise abatement wall.

⁴ Receptor R4-1 was added for purposes of mitigation analysis only.

Table A-2: Area F - Project Corridor - Noise Modeling Results (Continued)

Receptor ¹	Modeled Noise Levels (dBA)													
	A.		B.		C.		D.		E.		F.		G.	
	2012 Existing US 53		2037 Existing US 53 Alternative		Existing US 53 Noise Change (B-A)		Preferred Alternative (E-2)		Alternative E-2 Build Noise Change (D-A)		Alternative E-2 Build with 20-foot Noise Wall		Noise Wall Noise Change (D-F)	
NIGHTTIME	L10	L50	L10	L50	L10	L50	L10	L50	L10	L50	L10	L50 ²	L10 ³	L50 ²
R2 (C)	63.5	56.0	64.4	57.3	0.9	1.3	65.4	58.4	1.9	2.4	62.9	NA	2.5	NA
R2B (C)	63.9	56.5	64.7	57.9	0.8	1.4	64.9	58.0	1.0	1.5	56.0	NA	<u>8.9</u>	NA
R2C (C)	63.0	55.9	63.9	57.2	0.9	1.3	64.1	57.4	1.1	1.5	55.2	NA	<u>8.9</u>	NA
R1 (C)	64.0	56.5	64.8	57.8	0.8	1.3	65.0	57.9	1.0	1.4	54.4	NA	<u>10.6</u>	NA
R3 (C)	65.3	57.6	66.2	59.0	0.9	1.4	66.0	58.8	0.7	1.2	65.9	NA	0.1	NA
R4 (R)	60.4	53.7	61.3	54.9	0.9	1.2	60.8	54.6	0.5	0.9	56.0	NA	4.8	NA
R4-1 (R) ⁴							65.0				59.0		6.0	NA
R5 (R)	58.6	52.6	59.4	53.8	0.8	1.2	59.3	53.9	0.9	1.3	53.4	NA	<u>5.9</u>	NA
R5A (R)	58.3	52.4	59.1	53.6	0.8	1.2	59.2	54.0	1.0	1.6	54.0	NA	<u>5.2</u>	NA
R5B (R)	58.9	52.7	59.7	53.9	0.8	1.2	59.5	53.8	0.7	1.1	53.3	NA	<u>6.2</u>	NA
R5C (R)	58.6	52.7	59.4	53.9	0.8	1.2	59.9	54.6	1.5	1.9	56.6	NA	3.3	NA
R5D (R)	59.3	52.8	60.1	54.1	0.8	1.3	59.8	53.8	0.5	1.0	54.0	NA	<u>5.8</u>	NA
R6 (R)	58.7	52.5	59.4	53.7	0.7	1.2	59.6	54.4	1.3	1.9	55.0	NA	4.6	NA
R7 (R)	60.1	53.8	60.9	55.1	0.8	1.3	61.2	55.6	1.2	1.6	59.6	NA	1.6	NA
R51 (R)	59.9	53.8	60.7	55.0	0.8	1.2	60.8	55.3	1.0	1.5	59.8	NA	1.0	NA
RN1 (R)	63.9	55.6	64.8	56.9	0.9	1.3	64.5	56.9	0.6	1.3	59.1	NA	<u>5.4</u>	NA
RN2 (R)	62.9	55.2	63.8	56.4	0.9	1.2	63.7	56.4	0.8	1.2	53.6	NA	<u>10.1</u>	NA
RN3 (R)	63.2	55.4	64.1	56.7	0.9	1.3	64.1	56.7	0.9	1.3	53.2	NA	<u>10.9</u>	NA
RN4 (R)	63.5	55.6	64.4	56.9	0.9	1.3	64.4	56.9	1.0	1.3	53.4	NA	<u>11.0</u>	NA
RN5 (R)	63.8	55.6	64.7	56.9	0.9	1.3	64.7	56.9	1.0	1.3	53.5	NA	<u>11.2</u>	NA
RN6 (R)	64.2	55.9	65.1	57.2	0.9	1.3	65.0	57.3	0.9	1.4	53.8	NA	<u>11.2</u>	NA
RN7 (R)	64.7	56.7	65.6	58.1	0.9	1.4	65.1	58.1	0.9	1.4	54.1	NA	<u>11.0</u>	NA
RN8 (R)	64.7	56.8	65.6	58.1	0.9	1.3	65.3	58.1	0.9	1.3	54.9	NA	<u>10.4</u>	NA
RN9 (R)	64.9	57.0	65.8	58.3	0.9	1.3	65.8	58.4	0.9	1.4	55.6	NA	<u>10.2</u>	NA
RN10 (R)	62.7	55.7	63.5	57.0	0.8	1.3	63.6	57.0	0.9	1.3	62.9	NA	0.7	NA
RN11 (C)	62.9	55.5	63.8	56.9	0.9	1.4	63.8	56.9	0.9	1.4	63.8	NA	0.0	NA
RN12 (R)	60.5	54.0	61.3	55.3	0.8	1.3	61.3	55.3	0.8	1.3	56.5	NA	4.8	NA
RN13 (R)	60.3	53.9	61.1	55.1	0.8	1.2	61.1	55.2	0.8	1.3	55.9	NA	<u>5.2</u>	NA
RN14 (R)	59.9	53.5	60.7	54.8	0.8	1.3	60.7	54.8	0.9	1.3	55.0	NA	<u>5.7</u>	NA
RN15 (R)	60.0	53.6	60.9	54.8	0.9	1.2	60.8	54.9	0.9	1.3	54.7	NA	<u>6.1</u>	NA

Receptor ¹	Modeled Noise Levels (dBA)													
	A.		B.		C.		D.		E.		F.		G.	
	2012 Existing US 53		2037 Existing US 53 Alternative		Existing US 53 Noise Change (B-A)		Preferred Alternative (E-2)		Alternative E-2 Build Noise Change (D-A)		Alternative E-2 Build with 20-foot Noise Wall		Noise Wall Noise Change (D-F)	
RN16 (R)	59.9	53.5	60.7	54.7	0.8	1.2	60.7	54.7	0.8	1.2	54.3	NA	<u>6.4</u>	NA
RN17 (R)	59.5	53.2	60.3	54.4	0.8	1.2	60.3	54.4	0.8	1.2	54.1	NA	<u>6.2</u>	NA
RN18 (R)	59.7	53.3	60.5	54.6	0.8	1.3	60.5	54.6	0.8	1.3	54.2	NA	<u>6.3</u>	NA
RN19 (R)	59.5	53.2	60.3	54.4	0.8	1.2	60.3	54.4	0.8	1.2	54.2	NA	<u>6.1</u>	NA
RN20 (R)	59.1	52.8	59.9	54.1	0.8	1.3	59.9	54.1	0.8	1.3	54.1	NA	<u>5.8</u>	NA
RN21 (R)	58.9	52.7	59.7	54.0	0.8	1.3	59.7	53.9	0.8	1.2	54.2	NA	<u>5.5</u>	NA
RN22 (R)	58.9	52.7	59.7	53.9	0.8	1.2	59.6	53.9	0.7	1.2	53.3	NA	<u>6.3</u>	NA
RN23 (R)	61.3	54.4	62.2	55.6	0.9	1.2	62.1	55.6	0.8	1.2	53.4	NA	<u>8.7</u>	NA
RN24 (R)	60.5	53.7	61.4	54.9	0.9	1.2	61.2	54.9	0.7	1.2	54.9	NA	<u>6.3</u>	NA
RN25 (R)	61.6	54.3	62.5	55.6	0.9	1.3	62.3	55.5	0.7	1.2	57.3	NA	<u>5.0</u>	NA
MIN	58.3	52.4	59.1	53.6	0.7	1.2	59.2	53.8	0.5	0.9	53.2	NA	0.0	NA
MAX	65.3	57.6	66.2	59.0	0.9	1.4	66.0	58.8	1.9	2.4	65.9	NA	11.2	NA
Exceedances														
State	34	34	34	34	NA	NA	35	35	NA	NA	10	NA	NA	NA
Federal	0	NA	0	NA	0	NA	0	NA	0	NA	0	NA	NA	NA

Note: **Bold** numbers exceed Minnesota State Noise Standards, and underlined numbers approach or exceed the Federal Noise Abatement Criteria.

¹ (R) indicates residential location. (C) indicates commercial location. (I) indicates industrial location.

² L50 data for noise wall not included because is not a determinate for noise mitigation requirements.

³ Underlined numbers indicate receptors that are benefitted receivers of a noise abatement wall.

⁴ Receptor R4-1 was added for purposes of mitigation analysis only.

Table A-3. Area C

Noise Wall Analysis – Alternative E-2

Receptor ¹	L ₁₀ Daytime Peak-Hour Levels dBA						
	No Wall	20' Wall Analysis		15' Wall Analysis ³		10' Wall Analysis ³	
		Level	Reduction ²	15' Wall	Reduction	10' Wall	Reduction
R21(1)	66.0	65.9	0.1				
R22(2)	70.4	70.3	0.1				
R23 (1) ⁴	NA	NA	NA				
R24(1)	67.5	59.4	8.1				
R26(3)	66.2	59.3	6.9				
R26A(2)	65.1	61.1	4.0				
R26B(2)	65.3	64.1	1.2				
R29(2)	68.4	58.5	9.9				
R30(2)	66.1	58.3	7.8				
R31(1)	64.9	58.4	6.5				
R34(1)	64.3	57.6	6.7				
R35(1)	63.6	57.9	5.7				
R36(1)	63.0	57.5	5.5				
R37(1)	62.1	57.5	4.6				
R40(1)	61.9	57.4	4.5				
R41(1)	61.4	57.4	4.0				
R43(1)	60.2	57.4	2.8				
R44(1)	60.6	57.5	3.1				
R46(1)	63.1	58.8	4.3				
Benefitted receivers achieving 5 dBA			12				
Does wall achieve a 7 dBA reduction?			yes				
Length of Wall = 1260 feet							
Cost of Wall per 5 dBA receiver=			\$36,000				

¹ Number in parentheses is the number of residences/commercial buildings represented by the receptor.

² Bolded numbers indicate receptors that would have a five dBA reduction or more due to a noise barrier that reduces at least one receptor by 7 dBA or more.

³ 10' and 15' walls were not analyzed because the 20' wall achieved the cost-effectiveness requirement.

⁴ Receptor R23 to be acquired as part of the project

Table A-4. Area C

Noise Wall Analysis – Alternative E-2

Receptor ¹	L ₁₀ Nighttime Peak-Hour Levels dBA						
	No Wall	20' Wall Analysis		15' Wall Analysis ³		10' Wall Analysis ³	
		Level	Reduction ²	15' Wall	Reduction	10' Wall	Reduction
R21(1)	64.2	64.1	0.1				
R22(2)	68.7	68.6	0.1				
R23 (1) ⁴	NA	NA	NA				
R24(1)	65.8	57.6	8.2				
R26(3)	64.6	57.3	7.3				
R26A(2)	63.4	59.0	4.4				
R26B(2)	63.3	61.9	1.4				
R29(2)	66.7	56.8	9.9				
R30(2)	64.4	56.5	7.9				
R31(1)	63.2	56.5	6.7				
R34(1)	62.6	55.8	6.8				
R35(1)	61.9	56.0	5.9				
R36(1)	61.4	55.7	5.7				
R37(1)	60.4	55.6	4.8				
R40(1)	60.3	55.6	4.7				
R41(1)	59.7	55.6	4.1				
R43(1)	58.5	55.6	2.9				
R44(1)	59.0	55.7	3.3				
R46(1)	61.5	57.2	4.3				
Benefitted receivers achieving 5 dBA			12				
Does wall achieve a 7 dBA reduction?			yes				
Length of Wall = 1260 feet							
Cost of Wall per 5 dBA receiver=			\$36,000				

¹ Number in parentheses is the number of residences/commercial buildings represented by the receptor.

² Bolded numbers indicate receptors that would have a five dBA reduction or more due to a noise barrier that reduces at least one receptor by 7 dBA or more.

³ 10' and 15' walls were not analyzed because the 20' wall achieved the cost-effectiveness requirement.

⁴ Receptor R23 to be acquired as part of the project

Table A-5. Area F
Noise Wall Analysis – Alternative E-2

	L₁₀ Daytime Peak-Hour Levels						
	dBA						
		20' Wall Analysis		15' Wall Analysis ³		10' Wall Analysis ³	
Receptor ¹	No Wall	Level	Reduction ²	15' Wall	Reduction	10' Wall	Reduction
R2(1)	68.6	66.3	2.3				
R2b(1)	68.1	58.9	9.2				
R2C(1)	67.3	58.1	9.2				
R1(3)	68.2	57.3	10.9				
R3(1)	69.2	69.2	0.0				
R4(2)	63.9	59.4	4.5				
R4-1(1)	68.3	62.3	6.0				
R5(2)	62.3	56.2	6.1				
R5A(2)	62.1	56.8	5.3				
R5B(2)	62.5	56.2	6.3				
R5C(2)	62.8	59.6	3.2				
R5D(2)	62.8	57.0	5.8				
R6(2)	62.5	58.0	4.5				
R7(1)	64.1	62.7	1.4				
R51(2)	63.7	62.9	0.8				
RN1 (1)	67.8	62.5	5.3				
RN2 (1)	66.9	56.5	10.4				
RN3 (1)	67.4	56.1	11.3				
RN4 (1)	67.7	56.3	11.4				
RN5 (1)	68.1	56.4	11.7				
RN6 (1)	68.3	56.7	11.6				
RN7 (1)	68.4	57.0	11.4				
RN8 (1)	68.7	57.7	11.0				
RN9 (0)	69.1	58.5	10.6				
RN10 (1)	66.7	66.1	0.6				
RN11 (1)	67.1	67.0	0.1				
RN12 (1)	64.3	59.4	4.9				
RN13 (1)	64.2	58.8	5.4				
RN14 (1)	63.8	57.8	6.0				
RN15 (1)	63.8	57.5	6.3				
RN16 (1)	63.7	57.2	6.5				
RN17 (1)	63.3	56.9	6.4				
RN18 (1)	63.5	57.0	6.5				
RN19 (1)	63.3	57.0	6.3				
RN20 (1)	62.9	57.0	5.9				
RN21 (1)	62.7	57.1	5.6				
RN22 (1)	62.6	56.1	6.5				
RN23 (1)	65.2	56.2	9.0				
RN24 (1)	64.3	58.0	6.3				
RN25 (1)	65.4	60.7	4.7				
Benefitted receivers achieving 5 dBA			34				
Does wall achieve a 7 dBA reduction?			Yes				
Length of Wall = 2074 feet							
Cost of Wall per 5 dBA receiver=			\$25,462				

¹ Number in parentheses is the number of residences/commercial buildings represented by the receptor.

² Bolded numbers indicate receptors that would have a five dBA reduction or more due to a noise barrier that reduces at least one receptor by 7 dBA or more. Italicized numbers met noise reduction criteria under nighttime conditions and were including in the voting process for the construction of a noise wall.

³ 10' and 15' walls were not analyzed because the 20' wall achieved the cost-effectiveness requirement.

Table A-6. Area F
Noise Wall Analysis – Alternative E-2

	L₁₀ Nighttime Peak-Hour Levels						
	dBA						
		20' Wall Analysis		15' Wall Analysis ³		10' Wall Analysis ³	
Receptor ¹	No Wall	Level	Reduction ²	15' Wall	Reduction	10' Wall	Reduction
R2(1)	65.4	62.9	2.5				
R2b(1)	64.9	56.0	8.9				
R2C(1)	64.1	55.2	8.9				
R1(3)	65.0	54.4	10.6				
R3(1)	66.0	65.9	0.1				
R4(2)	60.8	56.0	4.8				
R4-1(1)	65.0	59.0	6.0				
R5(2)	59.3	53.4	5.9				
R5A(2)	59.2	54.0	5.2				
R5B(2)	59.5	53.3	6.2				
R5C(2)	59.9	56.6	3.3				
R5D(2)	59.8	54.0	5.8				
R6(2)	59.6	55.0	4.6				
R7(1)	61.2	59.6	1.6				
R51(2)	60.8	59.8	1.0				
RN1 (1)	64.5	59.1	5.4				
RN2 (1)	63.7	53.6	10.1				
RN3 (1)	64.1	53.2	10.9				
RN4 (1)	64.4	53.4	11.0				
RN5 (1)	64.7	53.5	11.2				
RN6 (1)	65.0	53.8	11.2				
RN7 (1)	65.1	54.1	11.0				
RN8 (1)	65.3	54.9	10.4				
RN9 (0)	65.8	55.6	10.2				
RN10 (1)	63.6	62.9	0.7				
RN11 (1)	63.8	63.8	0.0				
RN12 (1)	61.3	56.5	4.8				
RN13 (1)	61.1	55.9	5.2				
RN14 (1)	60.7	55.0	5.7				
RN15 (1)	60.8	54.7	6.1				
RN16 (1)	60.7	54.3	6.4				
RN17 (1)	60.3	54.1	6.2				
RN18 (1)	60.5	54.2	6.3				
RN19 (1)	60.3	54.2	6.1				
RN20 (1)	59.9	54.1	5.8				
RN21 (1)	59.7	54.2	5.5				
RN22 (1)	59.6	53.3	6.3				
RN23 (1)	62.1	53.4	8.7				
RN24 (1)	61.2	54.9	6.3				
RN25 (1)	62.3	57.3	5.0				
Benefitted receivers achieving 5 dBA			35				
Does wall achieve a 7 dBA reduction?			Yes				
Length of Wall = 2074 feet							
Cost of Wall per 5 dBA receiver=			\$24,735				

¹ Number in parentheses is the number of residences/commercial buildings represented by the receptor.

² Bolded numbers indicate receptors that would have a five dBA reduction or more due to a noise barrier that reduces at least one receptor by 7 dBA or more. Italicized numbers met noise reduction criteria under nighttime conditions and were including in the voting process for the construction of a noise wall.

³ 10' and 15' walls were not analyzed because the 20' wall achieved the cost-effectiveness requirement.

AREA C (2ND AVENUE) NOISE BARRIER - PUBLIC INVOLVEMENT WORKSHEET

BENEFITED PARCEL VOTING POINT RESULTS

Highway: US 53

From: 10th St. S

Barrier Length: 1260 ft

To: 170 feet east of 2nd Ave S

Barrier Height: 20 ft

Parcel	Benefited Parcel (1)		Location (2)		Owner/Resident			Voting Results			Voting Points			
	Yes	No	1st Row	2nd Row	Owner	Resident	Owner/Resident	Yes (3)	No (4)	No Reponse to date	Available	Yes	No	No Response to date
1 (Commercial)	X		X		X				X		4		4	
2	X			X	X	X				X	3			3
3	X			X	X	X (vacant)			X		3		2	1
4	X			X	X	X (vacant)		X			3	2		1
5	X			X	X	X (vacant)		X			3		2	1
6 (commercial)	X			X	X					X	2			2
7	X			X	X	X		X			3	3		
8	X			X			X			X	3			3
9	X			X			X		X		3		3	
10	X			X			X		X		3		3	
11	X			X			X		X		3		3	
14 (Commercial)	X		X		X					X	4		4	

Total: 37 5 21 11
Percentage: 14% 57% 30%

Notes:

- (1) Receptor location that receives a noise reduction at or above 5 dBA with the noise abatement measure.
- (2) 1st row column represents those properties located immediately adjacent to the highway right of way. 2nd row column represents all properties not immediately adjacent to the highway right of way
- (3) Response from letter soliciting benefited receptor viewpoint (i.e., "Yes, I do want the barrier")
- (4) Response from letter soliciting benefited receptor viewpoint (i.e., "No, I do not want the barrier")

AREA F (MIDWAY) NOISE BARRIER - PUBLIC INVOLVEMENT WORKSHEET

BENEFITED PARCEL VOTING POINT RESULTS

Highway: US 53

From: Cuyuna Drive

To: Mesabi Drive

Barrier Length: 2074 ft

Barrier Height: 20 ft

Parcel	Benefited Parcel ⁽¹⁾		Location ⁽²⁾		Owner/Resident			Voting Results			Voting Points			
	Yes	No	1st Row	2nd Row	Owner	Resident	Owner/Resident	Yes ⁽³⁾	No ⁽⁴⁾	No Response to date	Available	Yes	No	No response to date
14 (Commercial)	X			X	X				X		2		2	
17 (Commercial)	X			X	X	vacant			X		2		2	
19 (Commercial)	X			X	X				X		2		2	
20 (Commercial)	X			X	X				X		2		2	
21 (Commercial)	X			X	X				X		2		2	
25	X			X			X	X			3	3		
26	X			X			X	X			3	3		
27	X			X			X	X			3	3		
28	X			X			X	X			3	3		
29	X			X			X	X			3	3		
30	X			X			X		X		3		3	
31	X			X	X	vacant		X ⁽⁵⁾		X ⁽⁵⁾	3	2		1
32	X			X			X			X	3			3
33	X			X			X		X		3		3	
34	X			X			X	X			3	3		
35	X			X			X		X		3		3	
36	X			X			X		X		3		3	
37	X			X			X		X		3		3	
38	X			X			X	X			3	3		
39	X			X			X	X			3	3		
40	X			X			X		X		3		3	
41	X			X			X	X			3	3		
42	X			X			X		X		3		3	
43	X			X			X		X		3		3	
44	X			X			X		X		3		3	
45	X			X			X	X			3	3		
47 (commercial)	X			X	X				X		2		2	
49	X			X	X	X		X			3	3		
50	X			X			X	X			3	3		
51	X			X			X		X		3		3	
52	X			X			X		X		3		3	
53	X			X			X		X	X	3		3	
54	X			X			X		X		3		3	
55	X			X			X		X		3		3	
56	X			X			X	X		X	3	3		

Notes:

⁽¹⁾ Receptor location that receives a noise reduction at or above 5 dBA with the noise abatement measure.

⁽²⁾ 1st row column represents those properties located immediately adjacent to the highway right of way. 2nd row column represents all properties not immediately adjacent to the highway right of way

⁽³⁾ Response from letter soliciting benefited receptor viewpoint (i.e., "Yes, I do want the barrier")

⁽⁴⁾ Response from letter soliciting benefited receptor viewpoint (i.e., "No, I do not want the barrier")

⁽⁵⁾ Response is a split vote, with some combination of owner or resident voting yes, no, or no response.

Total: 99
Percentage: 41% 54 4
41% 55% 4%